

# Drug Use in Philadelphia, Pennsylvania: 2013

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## ABSTRACT

*The two key findings for the Philadelphia area for this reporting period were the continuing high levels of heroin and benzodiazepines in drug indicators. During 2013, indicators of drug use in Philadelphia were mixed. While alcohol, heroin, marijuana, and cocaine continued to be the most frequently reported or detected drugs of abuse in Philadelphia, the trend changes from 2012 were not consistent across indicators (market availability, treatment, criminal justice, and mortality). Accounting for 31.8 percent of all positive reports for 2013 among seized items analyzed, marijuana/cannabis remained the most frequently detected drug from the National Forensic Laboratory Information System (NFLIS) data for Philadelphia County, despite a decrease from 2012. There was little change in criminal justice indicator data, with 29.5 percent of individuals entering probation or parole for the first time in 2013 testing urinalysis-positive for marijuana, compared with 30 percent in 2012. Treatment data showed an increase in marijuana as the primary drug of choice at 22.7 percent of 2013 treatment admissions. While treatment data for heroin showed a decline from 23.0 to 20.5 percent between 2012 and 2013, NFLIS data showed an increase in positive reports for heroin. In 2013, heroin represented 15.2 percent of all positive reports among seized drug items analyzed in NFLIS laboratories, the highest percentage observed since 2009, when there was a change in NFLIS reporting. Heroin/morphine remained the most frequently detected drug among deaths caused by alcohol and/or drug intoxication. The Medical Examiner's Office (MEO) detected heroin/morphine in 256, or 54.8 percent, of fatalities caused by intoxication in 2013. Cocaine continued to be the second most frequently detected drug among these cases—it was detected among 215 individuals. When all deaths with the presence of drugs indicative of abuse or misuse are considered, which included deaths from other causes, cocaine was detected in 290 decedents. Data from the APPD indicated cocaine use was stable among this population and remained the second most frequently detected drug from APPD urinalysis results. Cocaine had consistently ranked fourth as primary drug of choice for treatment admissions in the past 5 years. Treatment data indicated a small increase from 2012, with 12.6 percent of 2013 treatment admissions reporting cocaine as the primary drug of choice. Smoking continued as the preferred route of administration for cocaine. Alcohol remained the overwhelming primary drug of choice at admission (36.8 percent). There was less detection among decedents; 22.3 percent of the 467 deaths caused by intoxication tested positive for alcohol. Treatment admissions for other opiates increased between 2012 and 2013. Mortality data, however, showed a decline. Oxycodone was the most frequently detected prescription opioid in the mortality data. Oxycodone retained its rank as fourth among positive NFLIS reports among seized items analyzed, despite a decrease in 2013 (5.0 percent) compared with 2012 (5.5 percent). Mortality indicators reflected increased*

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*detections of benzodiazepines. Alprazolam remained in the top five drugs detected among intoxication deaths, with other benzodiazepines also more frequently detected. In 2013, 4 benzodiazepines were among the top 10 drugs detected in intoxication deaths, including aminoclonazepam, oxazepam, and diazepam. Representing 4.6 percent of positive reports, alprazolam ranked fifth among seized items analyzed by NFLIS, but that was just slightly lower than the fourth ranked drug, oxycodone. Continual detections across multiple data sources (NFLIS, APPD, MEO) indicated PCP (phencyclidine) remained a popular illicit drug in Philadelphia, albeit at low levels. Trend data in HIV (human immunodeficiency virus) transmission risk showed a decrease in injection drug use from 2012 to 2013.*

## INTRODUCTION

### Area Description

Philadelphia, the largest city in the Commonwealth, is located in the southeastern corner of Pennsylvania. The 2010 U.S. Census population count of 1,526,006 showed an increase of 0.6 percent (8,456 persons) from the 2000 census count for Philadelphia. The population is 53.2 percent female. Since the 2000 census, the “White-only” population decreased to 41.0 percent, and all other racial groups increased. As of 2010, “Black-only” constituted 43.4 percent of the city’s population; “Asian-only” represented 6.3 percent; “Other Single Race-only” accounted for 6.5 percent; and residents who considered themselves “Two or More Races” represented 2.8 percent. The population with Hispanic or Latino origin (12.3 percent) also increased since 2000. These demographic data are provided to assist the reader in understanding the comparative impact of substance use by various populations.

### Data Sources

This report focuses primarily on the city and county of Philadelphia and includes data from the sources shown below. Reporting year is the calendar year unless specified as fiscal year (FY), which would begin on July 1 and end on June 30 of the specified FY.

- **Treatment admissions data** for residents of Philadelphia County were provided by the Behavioral Health Special Initiative (BHSI), supported by the Office of Addiction Services (OAS), Philadelphia Department of Behavioral Health and Intellectual disAbility Services. The database covers the uninsured and underinsured population of Philadelphia. The data represent self-reported mentions of use of preferred drugs by individuals admitted to treatment in 2013. This report focuses on primary choice of drugs at treatment admission. Beginning in FY 2014, services funded by the Pennsylvania Department of Drug and Alcohol Programs and tracked by BHSI for OAS are required to report through an Internet portal. This new reporting system does not require drug of choice in the data collection. The impact of this change in reporting protocol increased the proportion of “unknown” drug of choice to 4.8 percent in 2013 from 0.6 percent in 2012.
- **Mortality data** were provided by the Medical Examiner’s Office (MEO), Philadelphia Department of Public Health. These data cover mortality cases with toxicology reports indicating the detection of drugs in persons who died in Philadelphia from January 1, 2007, to December 31, 2013. Cause of death designations changed, effective January 1, 2009. Alcohol cases are only reported in combination with one or more other drugs detected in the system. The MEO does not test

for the presence of marijuana/tetrahydrocannabinol(THC)/cannabis. Beginning 2013, the MEO tested only blood specimens, with urine specimens tested in very few cases. This change in testing protocol resulted in approximately 14 percent fewer MEO cases in 2013 than in 2012 that were positive for any screens. OAS also instituted a new review process to count decedents with the presence of drugs. Combining the change in testing protocol and the change in the review process for reporting to the Community Epidemiology Work Group (CEWG) resulted in fewer individuals being reported as MEO cases with the presence of drugs, as well as fewer drug detections. Therefore, this report will focus on deaths caused by alcohol and/or drug intoxication.

- **Crime laboratory drug analysis data** came from the National Forensic Laboratory Information System (NFLIS). Data include analysis of drug samples tested by the Philadelphia Police Department Forensic Science Laboratory from 2011 to 2013. Recent changes in NFLIS methodology resulted in reports, not items, as units of analysis. NFLIS methodology allows for the accounting of up to three drugs positively identified per item submitted for analysis. The data presented are a combined count of primary, secondary, and tertiary positive reports for drug items analyzed. Therefore, the data in this report are on positive reports, not items analyzed. Data for this report were retrieved in May 2014, and are considered preliminary and subject to change.
- **Criminal justice urinalysis data** for adults who are in probation or parole status were derived from reports from the First Judicial District of Pennsylvania, Adult Probation and Parole Department (APPD), from January 1, 2007, to December 31, 2013. Data represent the first-time test for individuals when placed on probation or parole status.
- **Acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) data** were obtained from the Philadelphia Department of Public Health's AIDS Activities Coordinating Office Surveillance Report for 2013. At the time of this report, the 2013 Surveillance Report is preliminary for cases reported through December 31, 2013. Due to reporting delays, final data for any given year are made available in July of the following year. Final count of cases may differ from previously reported preliminary data.

## DRUG ABUSE PATTERNS AND TRENDS

Data for 2013 showed mixed indicators for drug use and abuse. The four drugs of most concern in Philadelphia continued to be alcohol, heroin, marijuana, and cocaine. Together, these drugs constituted 92.6 percent of the primary treatment admissions in 2013 with known drug of abuse (exhibit 1a); these four drugs have consistently been the most frequently reported drugs at treatment admission. Data on treatment admissions for 2014 are shown in exhibits 1a, 1b, and 2. Compared with 2012, treatment admissions in 2013 showed a slight increase in marijuana and cocaine use, whereas APPD urinalysis data indicated slight decreases. Heroin had mixed indicators: there were more heroin reports among seized items analyzed by NFLIS, but there were fewer treatment admissions. Primary treatment admissions for prescription opioids increased to a level observed in 2011 (4.4 percent). Primary treatment admissions for benzodiazepines continued to decline during this reporting period, but benzodiazepines remained popular as a secondary and tertiary drug of choice for marijuana and heroin. Drugs used at low or very low levels included antidepressants, antipsychotics, and the "speed-type" drugs (amphetamines, methamphetamine, and MDMA [3,4-methylenedioxymethamphetamine]). The demographic characteristics of people who entered treatment in 2013 revealed the overrepresentation of males and Blacks (exhibit 2).

Exhibit 3 shows the top 10 drugs detected among MEO cases with presence of drugs. Cocaine is the top illicit drug ( $n=290$ ) detected among MEO cases with the presence of drugs; however, among deaths caused by alcohol and/or drug intoxication, it was the second most frequently detected drug ( $n=215$ ) (exhibit 4). Exhibit 4 shows that in 2013, heroin/morphine was the most frequently detected drug among intoxication deaths. Exhibit 5 shows the changing demographics of PCP MEO cases.

Exhibit 6a shows the distribution of mode of death in 2013 for Philadelphia MEO cases with the presence of drugs. As in the previous annual report, the majority of 2013 deaths with the presence of drugs were accidents (68.2 percent). In keeping with death certification terminology, analysis of mortality data for this report considered mode or manner to reflect the intent, while the cause of death represented the physical events that brought on death. The underlying cause is the disease or injury that initiated the chain of events leading directly to death or the circumstances of the accident or violence that produced the fatal injury. For deaths caused by alcohol and/or drug intoxication, almost all of the deaths were accidental in nature (93.8 percent) (exhibit 6b). Consistent with previous years, mortality cases with the presence of drugs are suggestive of high polydrug use among the drug-abusing population in Philadelphia.

The total number of positive drug reports among drug items analyzed by the Philadelphia Police Forensic Science Laboratory and reported by NFLIS was 22,896; this total was lower than in 2012 ( $n=26,735$ ). The number of positive reports has been declining each year since 2009 ( $n=35,802$ ). The leading drugs identified among NFLIS positive reports were marijuana (31.8 percent,  $n=7,270$ ) and cocaine (28.1 percent,  $n=6,445$ ) (exhibit 7). The 2013 data were considered preliminary, and the reader is cautioned about comparisons to previous years, as 2013 data may be less complete at the point of data retrieval (May 2014).

The Philadelphia APPD analyzed urine specimens from people placed on probation or parole status. As shown in exhibit 8, the proportions of probationers/parolees who tested positive for any drug declined from 2008 to 2012. The proportion stayed stable from 2012 to 2013 (at 44.9 percent).

To gauge the amount of drug overdose among the drug-abusing population in Philadelphia, this report is utilizing data from the Philadelphia Fire Department's Emergency Medical Services (EMS). EMS responds to calls for overdoses and accidental poisonings. The manner in which the data are collected and reported precluded further refinement of overdose and poisoning. EMS reported 341,745 medical runs in 2013, of which 11,028 were runs in response to overdoses or accidental poisonings.

## Heroin/Morphine

Treatment admissions data revealed that heroin has moved down in ranking to third in 2013, constituting 20.5 percent of primary treatment admissions (exhibit 1a). Males constituted 75.6 percent of primary heroin admissions in 2013. Whites accounted for 64.7 percent of primary heroin treatment admissions, followed by Blacks (21.2 percent) and Asians and others (14.1 percent). Hispanics of any race constituted 13.7 percent of primary heroin treatment admissions. The reported preferred route of administration remained "other," which includes oral ingestion. More than three-quarters of heroin admissions (76.7 percent) preferred a route of administration other than injection, smoking, or snorting, a similar pattern to 2012 (74.0 percent), when the shift from preference for injection (57.8 percent in 2011) was initially noted.

As in the previous year, morphine/heroin detection ranked second among the 10 most frequently detected drugs in mortality cases with the presence of drugs. For the purpose of understanding the epidemiology of illicit drug use, the count includes morphine, 6-MAM (6-monoacetylmorphine), and 6-acetylmorphine. Detections for 6-acetylmorphine, a heroin metabolite, were lower in 2013 ( $n=122$ ) than in 2012 ( $n=220$ ). In deaths caused by alcohol and/or drug intoxication, morphine/heroin was the most frequently detected drug, present in 54.8 percent of these deaths (exhibit 4).

Market indicator data showed a large increase for heroin in 2013. While heroin remained a distant third in the number of positive drug reports ( $n=3,480$ ) compared with marijuana ( $n=7,270$ ) and cocaine ( $n=6,445$ ), there has been a continuous increase in the proportion of NFLIS positive reports that were identified as heroin (exhibit 7).

## Cocaine/Crack

Primary treatment admissions for cocaine continued to increase from 2011, yet they remained in a distant fourth rank relative to alcohol, marijuana, and heroin admissions. In 2013, cocaine constituted 12.6 percent of all primary treatment admissions (exhibit 1a), returning to the level reported for 2010. As in 2012, marijuana was the most frequent secondary drug mentioned for primary cocaine admissions. Cocaine, however, still remained the most popular secondary drug mentioned at admission for primary heroin treatment admissions. Almost three-quarters (71.7 percent) of primary cocaine treatment admissions were male, a proportion slightly higher than in 2012 (69.6 percent). Blacks constituted the majority race (61.7 percent), while less than one-quarter of primary admissions were White (21.0 percent). Asians and other races constituted 17.3 percent. Hispanics of any race represented 15.4 percent of total primary cocaine admissions in 2013. Almost two-thirds of primary treatment admissions for cocaine (64.6 percent) were in the older adult category, age 35 and older.

Cocaine was the top illicit drug detected among Philadelphia MEO cases in 2013 (exhibit 3). The number of deaths with the presence of cocaine in 2013 was 290, of which 215 deaths were caused by alcohol and/or drug intoxications. Similar to 2012, cocaine detections were higher than those for morphine/heroin when counting all deaths with the presence of drugs indicative of abuse and misuse, whereas morphine/heroin was the most frequently detected drug for intoxication deaths. For the purpose of understanding the epidemiology of illicit drug use, cocaine counts include detection of metabolites benzoylecgonine, ecgonine methyl ester, and ecgonine ethyl ester. When the cause of death was alcohol and/or drug intoxication, cocaine was detected in 46.0 percent (exhibit 4), placing it as the second most detected drug among those deaths.

NFLIS data in 2013 revealed that cocaine continued to be among the top three drugs identified from items seized and analyzed in NFLIS laboratories. Cocaine represented the second highest number of positive reports ( $n=6,445$ ) and accounted for 28.1 percent of all positive drug reports (exhibit 7).

APPD urinalysis data of adults entering probation or parole in 2013 revealed the presence of cocaine in 21.5 percent of all drug-positive tests (exhibit 8). The number of individuals tested in 2013 ( $n=4,515$ ) was substantially lower than in 2012 ( $n=5,219$ ), and cocaine tested positive for 9.7 percent of those individuals. Cocaine continued to rank second among the most frequently detected drugs on the APPD panel.



## Other Opiates/Opioids

The nonmedical use of pharmaceutically produced opioid products was increasingly reported by individuals entering treatment. As primary drug of choice, “Other Opiates/Synthetics” represented 4.4 percent of primary treatment mentions (exhibit 1a). This almost threefold increase in 2013 from 2012 raised the proportion of primary treatment admissions for other opioids to the level that was observed in 2011 (4.5 percent). Of the 370 primary treatment admissions, 66.8 percent were male; 62.4 percent were White; 25.4 percent were Black; 12.2 percent were Asians and other races; and 12.4 percent were of Hispanic ethnicity. Individuals admitted for opioid treatment, not including heroin, were older in 2013 than in 2012. The largest age category for primary other opiates/opioids admissions was age 35 and older (48.6 percent).

APPD urinalysis data for adults on probation or parole do not distinguish heroin from all opiates/opioids. In 2013, opiates/opioids were detected in 8.9 percent of all tests, similar to the rate of detection in the previous year (exhibit 8). Opiates/opioids ranked third in the APPD data in 2013.

From the market and mortality indicators, oxycodone remained the most popular prescription opioid in circulation in Philadelphia. Hydrocodone, previously in the top 10 among NFLIS positive reports between 2009 and 2011, moved farther down in rank in 2013 (rank 14) than in 2012 (rank 11).

### *Oxycodone*

In 2013, oxycodone was detected in 134 decedents (exhibit 3); of that number, 90 had died from alcohol and/or drug intoxication (exhibit 4). Oxycodone retained its fifth rank among the most frequently detected drugs among MEO cases.

Oxycodone represented the fourth most frequently identified drug among all drug reports from drug items seized and analyzed in NFLIS laboratories in Philadelphia in 2013 ( $n=1,141$ ); this represents the same ranking as in the previous 3 years. As a percentage of all positive drug reports, oxycodone decreased from 5.5 percent in 2012 to 5.0 percent in 2013 (exhibit 7).

### *Codeine*

The reader is cautioned in interpreting data on codeine detection. Codeine is found in heroin, and when codeine is present in low or trace quantities, it is likely that the codeine detections are coming from heroin. There were fewer detections of codeine among MEO cases in 2013. The number of codeine-positive cases was 96, of which 86 had died from alcohol and/or drug intoxication. In 2012, codeine was the third most frequently detected drug among alcohol and/or drug intoxication deaths (43.1 percent), but it dropped to the sixth most frequent drug in 2013 (at 18.4 percent) (exhibit 4).

### *Methadone*

The reader is cautioned in interpreting data in this section. When methadone was detected among MEO cases, it was uncertain whether methadone was used as directed by a physician for the management of pain, as a prescribed adjunctive measure in treatment/recovery programs, and/or in an abusive or recreational manner. Beginning with 2013 data, review of MEO cases included a physician review of treatment history on uninsured and underinsured individuals served by the

OAS or for the Medicaid-eligible population managed by Community Behavioral Health. This review serves to remove individuals receiving methadone as part of treatment from being counted as MEO cases with the presence of drugs. MEO detections of methadone in decedents numbered 66 in 2013 (exhibit 3), of which 53 had died from alcohol and/or drug intoxication. Methadone ranked 10th among most frequently detected drugs in intoxication deaths in 2013 (exhibit 4).

## **Benzodiazepines**

Benzodiazepines, particularly alprazolam, continued to be used in combination with other drugs in Philadelphia, based on mortality data. At 67 admissions, benzodiazepines moved down to seventh place rank among primary treatment admissions (exhibit 1a). However, benzodiazepines are among the top three for secondary and tertiary mentions for primary heroin and marijuana treatment admissions. Focus groups with individuals in recovery in 2013 consistently identified benzodiazepines as a mixer or booster drug in combination with other drugs and alcohol. Of the top 10 drugs detected among intoxication deaths, there were 4 benzodiazepines: alprazolam, aminoclonazepam, oxazepam, and diazepam.

APPD urinalysis data for first time adults on probation or parole in 2013 revealed the presence of benzodiazepines in 7.4 percent of all individuals tested (exhibit 8). This represents the highest rate of benzodiazepine-positive detections among individuals tested between 2008 and 2015.

### *Alprazolam*

Among users of benzodiazepines, alprazolam has been the preferred drug since 2001, based on MEO reports and NFLIS data. Alprazolam was detected in 199 decedents in 2013 (exhibit 3), of which 153 deaths (exhibit 4) were caused by alcohol and/or drug intoxication. Alprazolam was the third most frequently detected drug among mortality cases with the presence of drugs, including intoxication deaths.

In 2013, alprazolam reports represented the fifth highest number of positive drug reports among drug items analyzed in NFLIS laboratories ( $n=1,052$ ), lower than in 2012 ( $n=1,327$ ). As a percentage of all positive drug reports, alprazolam constituted 4.6 percent of total reports (exhibit 7).

### *Diazepam*

Diazepam was detected in 97 decedents in 2013, making it the 10th most frequently detected drug during that time period (exhibit 3). Diazepam was detected in 64 of the 467 intoxication deaths (exhibit 4). Diazepam has consistently ranked among the top 10 most frequently detected drugs among mortality cases with the presence of drugs.

### *Clonazepam*

Clonazepam ranked eighth in the number of positive drug reports among drug items seized and analyzed in NFLIS laboratories in 2013 ( $n=209$ ), accounting for 0.9 percent of all positive reports (exhibit 7).

### *Other Benzodiazepines*

Other benzodiazepines that were detected frequently in 2013 intoxication deaths included 7-aminoclonazepam ( $n=76$ ), oxazepam ( $n=64$ ), and diazepam ( $n=64$ ). Prior to 2013, these drugs were not among the top 10 most frequently detected drugs.

### **Methamphetamine, Amphetamines, MDMA, and MDA**

Methamphetamine and amphetamines remained a relatively minor problem in Philadelphia, and use of these drugs appeared to be confined to a small portion of the population, based on various indicators. As the primary drug of choice, methamphetamine and amphetamine only represented 0.1 percent of treatment admissions with known drug of abuse (exhibit 1a).

MEO data revealed that in 2013, there were 15 detections of methamphetamine, 3 detections of methylone, and 3 detections of MDA (3,4-methylenedioxymphetamine). Historically, these drugs are not frequently detected drugs in MEO cases.

NFLIS data for 2013 revealed that out of 22,896 drug-positive results, methamphetamine reports ranked 12th among total reports detected in analyzed drug items ( $n=100$ ); amphetamine ranked 18th ( $n=39$ ); MDMA ranked 26th ( $n=13$ ); and there were 3 positive results for MDA. Together ( $n=155$ ), these detections accounted for 0.7 percent of the total positive reports among drug items seized and analyzed by NFLIS laboratories.

APPD urinalysis data of adults on probation or parole in 2013 revealed the presence of amphetamines in 0.8 percent of all individuals tested (exhibit 8).

### **Marijuana**

In 2013, marijuana was again ranked second in the number of primary treatment admissions. There was a large increase (18.9 percent) from 2012 in the proportion of treatment admissions that were primary for marijuana (22.7 percent). Males represented 87.6 percent of primary marijuana treatment admissions in 2013. Blacks accounted for 75.7 percent of primary treatment admissions for marijuana, followed by Whites (10.6 percent) and Asians and others (13.7 percent). The age categories of 18–25 and 26–34 combined constituted the majority of primary marijuana treatment admissions. Historically, for youth age 17 and younger, marijuana was overwhelmingly the primary drug of choice for treatment. The proportion of treatment admissions for marijuana among youths has been declining; in 2013, 17.8 percent of all treatment admissions for those younger than 17 were for marijuana.

Preliminary NFLIS data for 2013 showed marijuana accounted for 31.8 percent of positive reports among seized items analyzed (exhibit 7). As in the prior 3 years, marijuana represented the highest percentage of positive reports.

APPD urinalysis data, the first tests of adults placed on probation or parole, continued to detect the presence of marijuana in more samples than any other drug, with marijuana representing two-thirds (65.6 percent) of the tests that were positive for any drug in 2013 (exhibit 8). Marijuana continued to be the most frequently detected drug among first timers to probation or parole.



## PCP (Phencyclidine)

As a primary drug of choice at treatment admission, PCP has historically been low, averaging 1.0 percent of primary drug mentions per year. In 2013, PCP primary treatment admissions accounted for 1.3 percent of all primary admissions (exhibit 1a).

There were 61 PCP detections in MEO cases in 2013; this was a slight decrease from 2012 ( $n=69$ ). PCP reports represented the seventh highest number of positive reports among total reports from drug items seized and analyzed in NFLIS laboratories in 2013 ( $n=503$ ), accounting for 2.2 percent of the total (exhibit 7). PCP has consistently appeared in the top 10 for NFLIS positive reports in Philadelphia, in contrast to national data, where it has not. Coupled with PCP being continually mentioned as primary drug of choice at treatment admissions, it appears that there is a culture of PCP use in Philadelphia.

APPD urinalysis data of adults on probation or parole in 2013 revealed the presence of PCP in 9.0 percent of the drug-positive tests. PCP positivity ranked sixth in the APPD panel, with 4.1 percent testing positive.

The demographic profile of PCP users may be changing. Among 2013 MEO cases with PCP detections, the proportion of White decedents increased from 43.5 percent to 57.3 percent between 2012 and 2013 (exhibit 5).

## Antidepressants

Changes in MEO testing protocol and the review process for CEWG reporting resulted in fewer cases being reported as MEO cases with the presence of drugs. These changes make the detections of antidepressants difficult to interpret, and no trend data are presented in this report. In 2013, there were 47 detections of citalopram among MEO cases with the presence of drugs; among them, 36 were intoxication deaths.

## Antipsychotics

MEO toxicology reports revealed the presence of antipsychotic drugs (exhibit 9). In past analyses, the relatively rare presence of more than one antipsychotic in a decedent led to the hypothesis that these drugs were not abused. The close correspondence between the numbers of different antipsychotic drugs that were detected to the number of individuals with antipsychotic detections had lent support to that hypothesis. Changes in MEO testing protocol and the review process for CEWG reporting make data on antipsychotic detections difficult to interpret. The most frequently detected antipsychotic drug in 2013 was quetiapine, consistent with the observation from previous years. The second highest antipsychotic drug detected was olanzapine. Clozapine was detected in 11 decedents, almost twice as many as in 2012 (exhibit 9).

## Alcohol

As a primary drug of choice, alcohol ranked first among the treatment admissions in 2013 (exhibit 1a). Males constituted 77.6 percent of primary alcohol treatment admissions in 2013. Blacks accounted for 61.3 percent of primary alcohol treatment admissions in 2013, followed by Whites (26.4 percent)

and Asians and others (11.3 percent). Hispanics of any race accounted for 10.5 percent. While youths (17 and younger) represented 1.7 percent of primary treatment admissions for alcohol, 15.5 percent of youths seeking treatment were seeking treatment primarily for alcohol abuse, which is a large decrease from 2012 (36.6 percent).

The number of deaths with the presence of alcohol in combination numbered 169 in 2013 (exhibit 3). Among decedents whose cause of death was determined to be alcohol and/or drug intoxication, 22.3 percent of these deaths tested positive for alcohol (exhibit 4). Change in the testing protocol, with using blood specimens only, may have affected the number of detections.

## **INFECTIOUS DISEASES RELATED TO DRUG ABUSE**

In 2013, Philadelphia recorded 119 AIDS diagnoses and 545 newly diagnosed HIV cases. Trend data in HIV/AIDS transmission showed decreases in cases associated with injection drug use in 2013. Nine out of 119 (7.5 percent) AIDS cases diagnosed in 2013 had injection drug use as the transmission risk; this represented a decrease from 11.7 percent of 2012 diagnoses (exhibit 10). Among HIV cases newly diagnosed in 2013, 26 cases, or 4.4 percent, resulted from infected needle sharing (exhibit 11). The rates of HIV/AIDS and newly diagnosed HIV cases were showing a clear decline in transmission risk associated with sharing infected needles.

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**Exhibit 1a. Number and Percentage of Primary Drugs of Abuse at Treatment Admission for Uninsured and Underinsured Individuals, Philadelphia: 2013**

Primary Drug of Abuse	Number of Treatment Admissions	Percentage with Known Drugs of Abuse
Alcohol	3,087	36.8
Heroin	1,720	22.7
Marijuana	1,903	20.5
Cocaine: Crack/Powder	1,058	12.6
Other Opiates/Synthetics	370	4.4
PCP (Phencyclidine)	107	1.3
Benzodiazepine	67	0.8
Methamphetamine and Amphetamine	10	0.1
MDMA	0	0.0
All Other Known Drugs	58	0.7

SOURCE: Behavioral Health Special Initiative

**Exhibit 1b. Route of Administration of Primary Drugs of Abuse Reported at Treatment Admission by Uninsured and Underinsured Individuals, by Number and Percentage, Philadelphia: 2013**

Route of Administration	Number of Treatment Admissions	Percentage of Treatment Admissions
Smoking	2,721	32.2
Sniffing	2	0.02
Injection	407	4.8
Other	5,672	67.1
Unknown	0	0.0

SOURCE: Behavioral Health Special Initiative

**Exhibit 2. Demographic Profiles by Number and Percentage of Individuals Who Entered Substance Abuse Treatment, Philadelphia: 2013**

Demographic Characteristics	Number of Treatment Admissions	Percentage of Treatment Admissions
<b>Gender</b>		
Male	6,651	75.6
Female	2,151	24.4
<b>Race/Ethnicity</b>		
Black	4,696	53.4
White	2,809	31.9
Asian/Other Race(s)	1,297	14.7
Unknown/Unrecorded	—	—
Hispanic (Any Race)	1,108	12.6
<b>Age</b>		
17 and Younger	350	4.0
18–25	1,762	20.0
26–34	2,950	33.5
35 and Older	3,740	42.5

SOURCE: Behavioral Health Special Initiative

**Exhibit 3. Number of Medical Examiner's Office (MEO) Cases With the Presence of the Most Frequently Detected Drugs, Philadelphia: 2013**

MEO-Identified Drugs	2013
Cocaine	290
Morphine/Heroin	285
Alcohol-in-Combination	169
Codeine	96
Oxycodone	134
Alprazolam	199
Diphenhydramine	82
Methadone	66
Oxymorphone	66
Diazepam	97
<b>Total Deaths with the Presence of Drugs</b>	<b>679</b>

SOURCE: Medical Examiner's Office, Philadelphia Department of Public Health

**Exhibit 4. Most Frequently Detected Drugs Among Alcohol and/or Drug Intoxication Deaths, Philadelphia: 2012 and 2013**

Detected Drugs, 2012	Number N=497	Percentage of Intoxication Deaths <sup>1</sup>	Detected Drugs, 2013	Number N=467	Percentage of Intoxication Deaths <sup>1</sup>
Heroin/Morphine	287	57.7	Heroin/Morphine	256	54.8
Cocaine	256	51.5	Cocaine	215	46.0
Codeine	214	43.1	Alprazolam	153	32.8
Alprazolam	150	30.2	Ethanol	104	22.3
Ethanol	145	29.2	Oxycodone	90	19.3
Oxycodone	124	24.9	Codeine	86	18.4
Diphenhydramine	77	15.5	Aminoclonazepam	76	16.3
Methadone	77	15.5	Oxazepam	64	13.7
Oxymorphone	72	14.5	Diazepam	64	13.7
Nordiazepam	72	14.5	Methadone	53	11.3

<sup>1</sup>Percentages do not sum to 100 because more than one drug may be detected in a death.

SOURCE: Medical Examiner's Office, Philadelphia Department of Public Health

**Exhibit 5. Demographic Profile of Medical Examiner's Office Cases With PCP (Phencyclidine) Detected, Philadelphia: 2012 and 2013**

Gender, Race Group <sup>1</sup>	2012		2013	
	Number	Percentage	Number	Percentage
Black, Female	11	15.9	3	4.9
Black, Male	26	37.7	21	34.4
White, Female	10	14.5	11	18.0
White, Male	20	29.0	24	39.3

<sup>1</sup>Decedents with unknown gender and/or race are not included in this profile.

SOURCE: Medical Examiner's Office, Philadelphia Department of Public Health



**Exhibit 6a. Number and Percentage Distribution of Mode or Manner of Death for Medical Examiner's Office Cases With the Presence of Drugs, Philadelphia: 2013**

Mode/Manner of Death	Number of Deaths	Percentage
Accident	467	68.2
Homicide	72	10.5
Natural	70	10.2
Suicide	66	9.6

SOURCE: Medical Examiner's Office, Philadelphia Department of Public Health

**Exhibit 6b. Mode or Manner of Death for Alcohol and/or Drug Intoxication Deaths, by Number and Percentage, Philadelphia: 2013**

Mode/Manner of Death	Number of Deaths	Percentage
Accident	438	93.8
Suicide	27	5.8
Homicide	1	0.2

SOURCE: Philadelphia Medical Examiner's Office

**Exhibit 7. Top 10 Drugs Identified in NFLIS Drug Reports From Items Seized and Analyzed in Forensic Laboratories, Philadelphia: 2011–2013**

Rank in 2013	Drugs	Number of Reports, 2011	Percentage of Reports, 2011	Number of Reports, 2012	Percentage of Reports, 2012	Number of Reports, 2013	Percentage of Reports, 2013
1	Marijuana/Cannabis	8,834	32.5	8,789	32.9	7,270	31.8
2	Cocaine	8,967	33.0	7,216	27.0	6,445	28.1
3	Heroin	3,499	12.9	3,648	13.6	3,480	15.2
4	Oxycodone	1,715	6.3	1,472	5.5	1,141	5.0
5	Alprazolam	1,233	4.5	1,327	5.0	1,052	4.6
6	Acetaminophen	33	0.1	1,027	3.8	902	3.9
7	PCP (Phencyclidine)	475	1.8	527	2.0	503	2.2
8	Clonazepam	248	0.9	216	0.8	209	0.9
9	Buprenorphine	144	0.5	149	0.6	143	0.6
10	Naloxone	N/A	N/A	127	0.5	133	0.6

SOURCE: NFLIS, DEA

**Exhibit 8. Number of Drug-Positive Urinalysis Results Among Adults in Probation or Parole Status, Tested for the First Time, and Percentage Testing Positive for Any Drug, Philadelphia: 2008–2013**

Drug/Drug Group <sup>1</sup>	2008	2009	2010	2011	2012	2013
Marijuana	1,904	1,406	1,560	1,598	1,564	1,330
Cocaine	1,148	581	520	547	539	436
Benzodiazepines	477	296	335	371	349	333
Methadone <sup>2</sup>	258	164	— <sup>2</sup>	— <sup>2</sup>	— <sup>2</sup>	— <sup>2</sup>
Opioids	441	317	297	369	427	402
Phencyclidine (PCP)	354	263	285	255	249	183
Barbiturates <sup>2</sup>	50	27	— <sup>2</sup>	— <sup>2</sup>	— <sup>2</sup>	— <sup>2</sup>
Amphetamines	35	18	19	23	21	36
Propoxyphene	12	26	2	0	0	0
<b>Total Persons Tested</b>	<b>6,835</b>	<b>4,752</b>	<b>4,806</b>	<b>5,165</b>	<b>5,219</b>	<b>4,515</b>
<b>Total Positive Persons</b>	<b>3,437</b>	<b>2,337</b>	<b>2,281</b>	<b>2,384</b>	<b>2,345</b>	<b>2,028</b>
<b>Percent That Tested Positive</b>	<b>50.3</b>	<b>49.2</b>	<b>47.5</b>	<b>46.2</b>	<b>44.9</b>	<b>44.9</b>

<sup>1</sup>Some people tested positive for more than one drug.

<sup>2</sup>There was no testing for these drugs after 2009.

SOURCE: Adult Probation/Parole Department, First Judicial District, Philadelphia

**Exhibit 9. Number of Antipsychotic Drugs Detected in Decedents, Philadelphia: 2008–2013**

Drug Detected	2008	2009	2010	2011	2012	2013
Quetiapine	49	37	44	38	50	53
Olanzapine	19	9	8	5	15	14
Clozapine	2	6	7	2	6	11
Haloperidol	2	1	1	1	5	3

SOURCE: Philadelphia Medical Examiner's Office

**Exhibit 10. Number and Percentage of AIDS Diagnoses, by Year of Diagnosis and by Exposure Category,<sup>1</sup> Philadelphia Residents: 2011–2013**

Exposure Category	2011		2012		2013	
	No.	%	No.	%	No.	%
IDU	14	7.8	23	11.7	9	7.5
MSM and IDU	*2	1.6	0	0	0	0
MSM	58	32.4	72	36.9	45	37.8
Heterosexual Contact	102	56.9	91	46.6	62	52.1
No Identified Risk	*2	1.1	9	4.6	*2	2.5

<sup>1</sup>IDU=Injection drug user; MSM=Men who have sex with men.

<sup>2</sup>The “\*” symbol indicates that the count is fewer than five and is suppressed.

SOURCE: Philadelphia Department of Public Health, AIDS Activities Coordinating Office; due to reporting delays, final data for any given year are made available in July of the following year

**Exhibit 11. Number and Percentage of Newly Diagnosed HIV Cases, by Exposure Category,<sup>1</sup>  
Philadelphia: 2011–2013**

Exposure Category	2011		2012		2013	
	No.	%	No.	%	No.	%
IDU	50	7.4	66	8.9	24	4.4
MSM and IDU	11	1.6	8	1.2	*2	0.3
MSM	275	40.8	308	41.8	266	48.8
Heterosexual Contact	326	48.3	326	44.2	238	43.6
No Identified Risk	9	1.3	25	3.3	13	2.3

<sup>1</sup>IDU=Injection drug user; MSM=Men who have sex with men.

<sup>2</sup>The “\*” symbol indicates that the count is fewer than five and is suppressed.

SOURCE: Philadelphia Department of Public Health, AIDS Activities Coordinating Office; Due to reporting delays, final data for any given year are made available in July of the following year